



USNA Proportional Outcomes Study SLT Brief March 19, 2013 CAPT [REDACTED]

5 U.S.C. §552(b)(6)

Equity Study and Assessment Committee (ESAC)

Purpose

- to assess the equity of access and achievement of various midshipmen demographic sub-groups from multiple perspectives
- to recommend policies and procedures to address identified disparities in outcomes

Context

- Over the 47-month USNA Program
- Equity is about **Opportunity** and **Outcomes**

Equity Perspectives

- Graduation Rates/Retention and Attrition
- Academic Excellence
- Professional Excellence
- Physical Mission
- Institutional Receptivity

Graduation Rates and Attrition Baseline

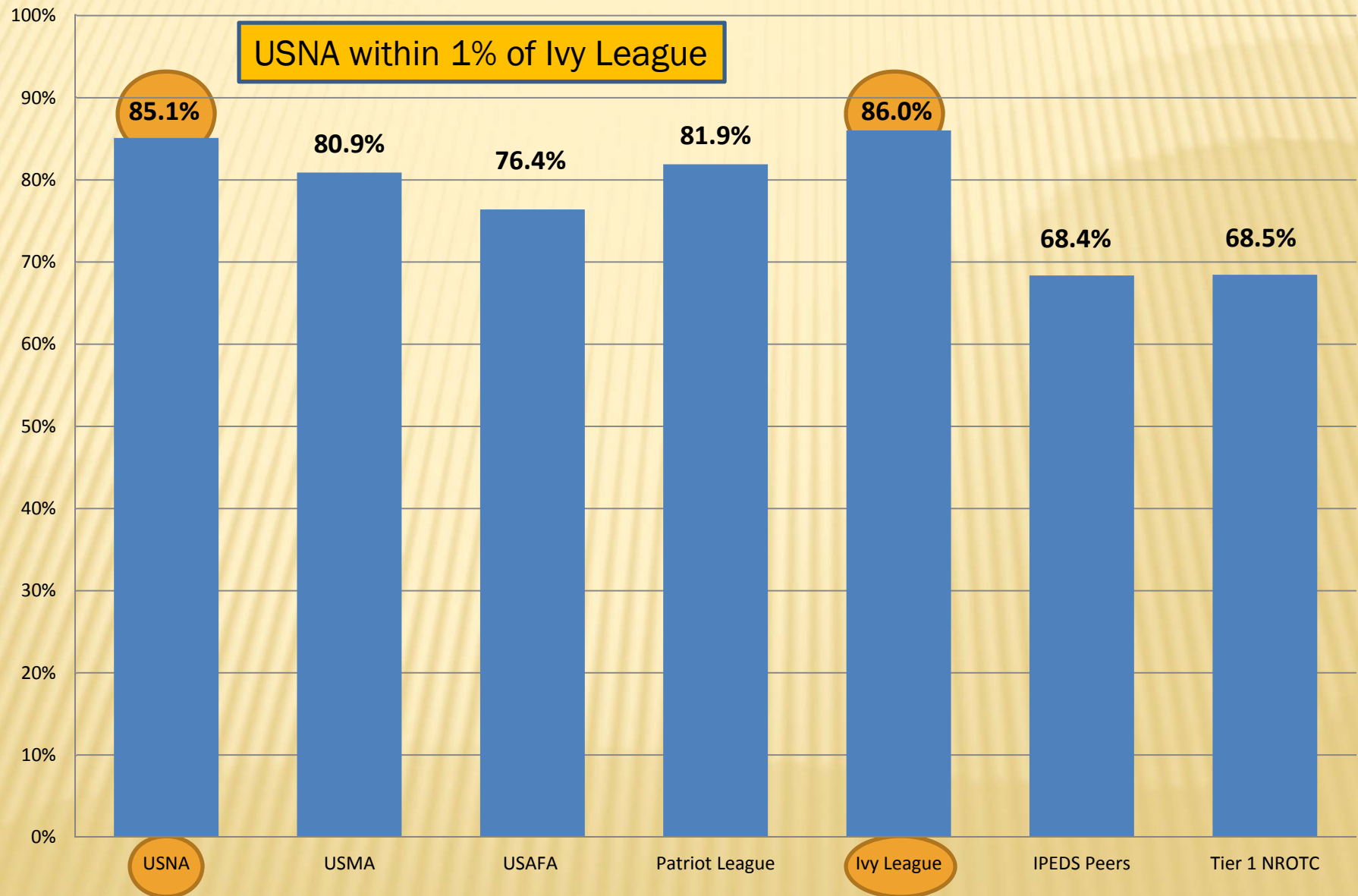
- **Comparison Groups**

- West Point, Air Force Academy
- Patriot League
- Ivy League Schools and Stanford
- Integrated Postsecondary Education System (IPEDS) Comparison Group (48 institutions)
- Tier 1 NROTC Units (27 institutions)

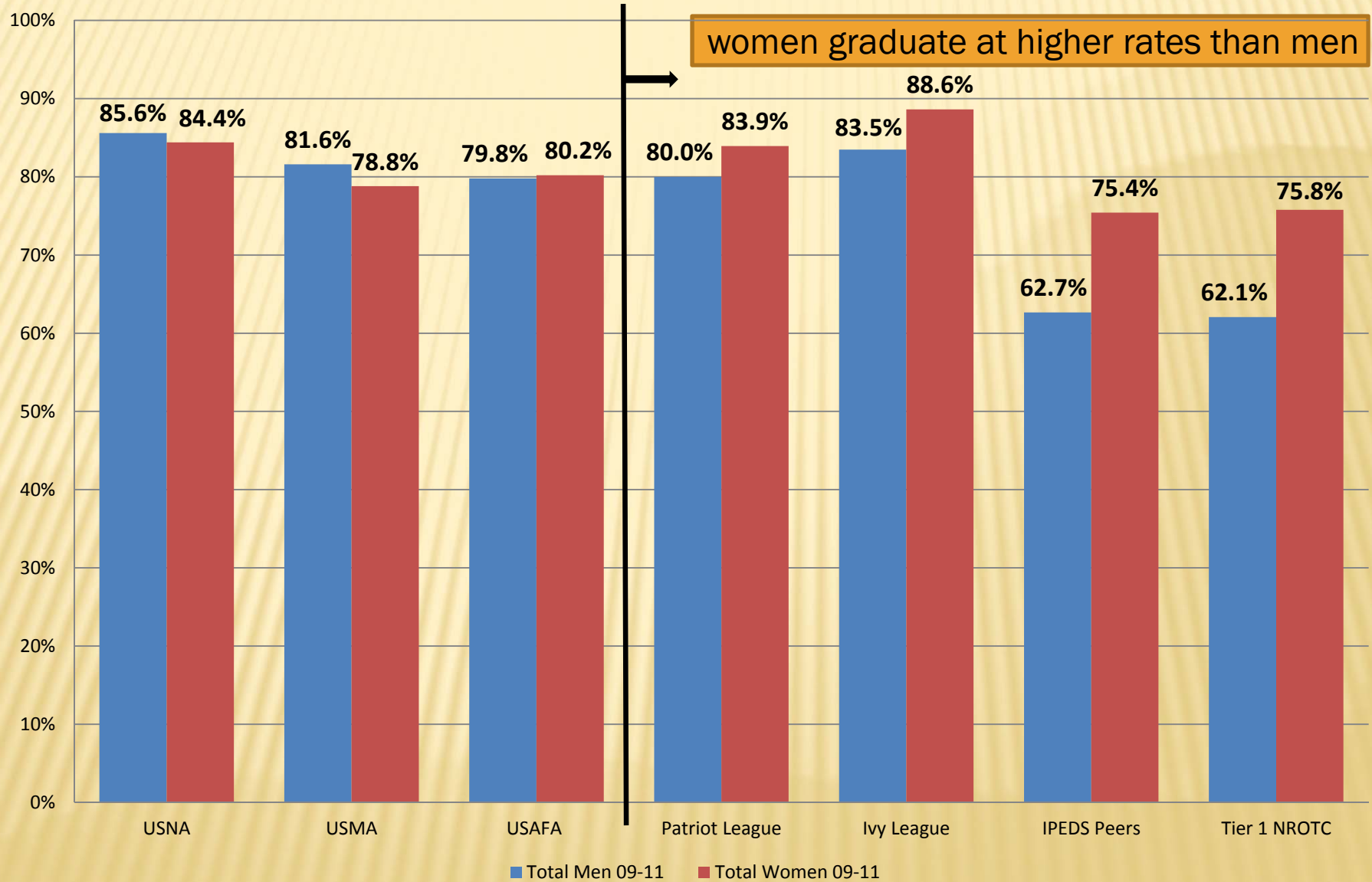
- **Demographics**

- Gender
- Race and Ethnic Categories
- Admissions Feeder Source (Direct, NAPS)
- Varsity Athletics

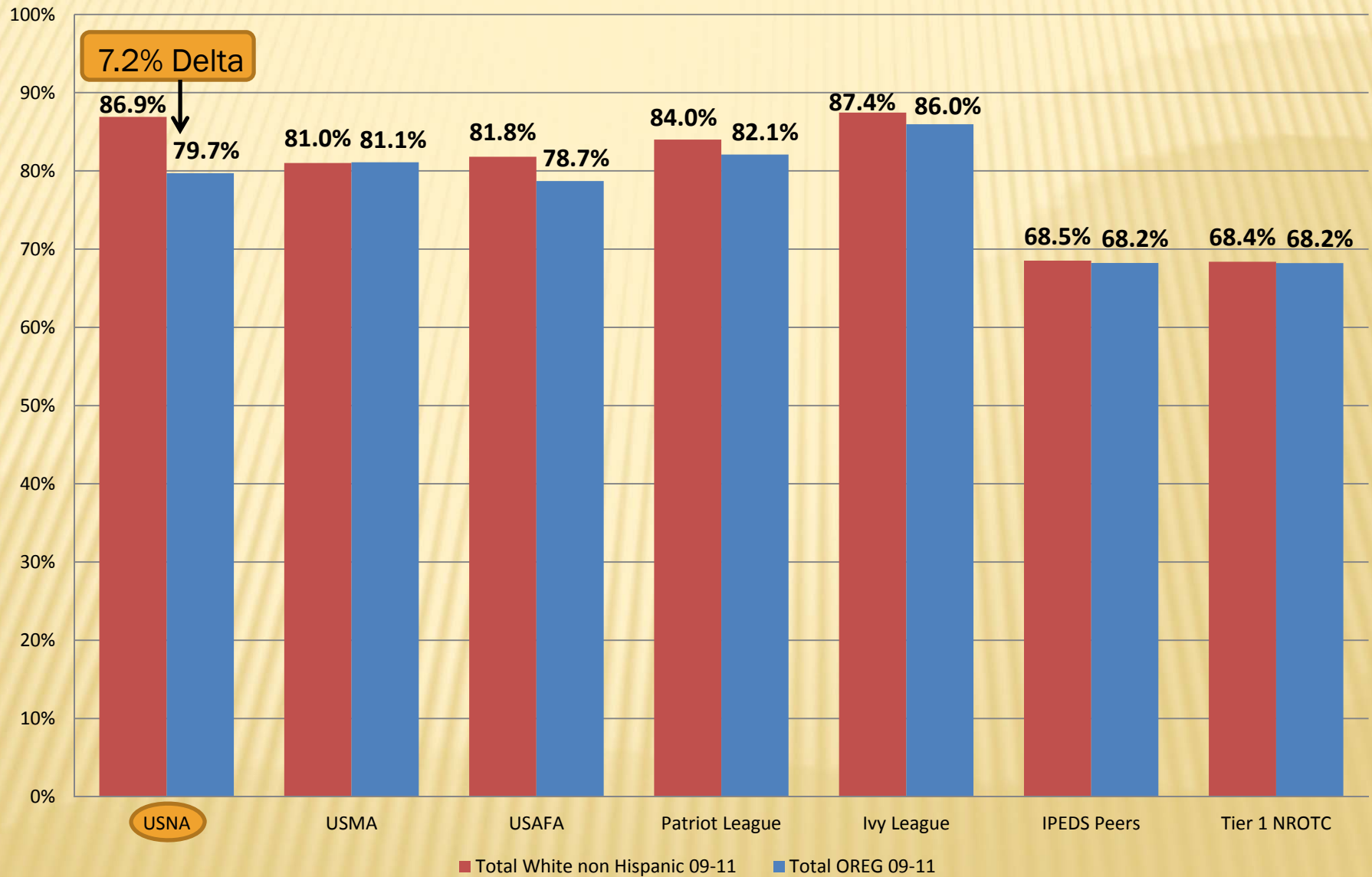
USNA compared to Peers Total 4 Year Graduation Rates 2009-11



USNA compared to Peers 4 Year Graduation Rates 2009-11 by Gender

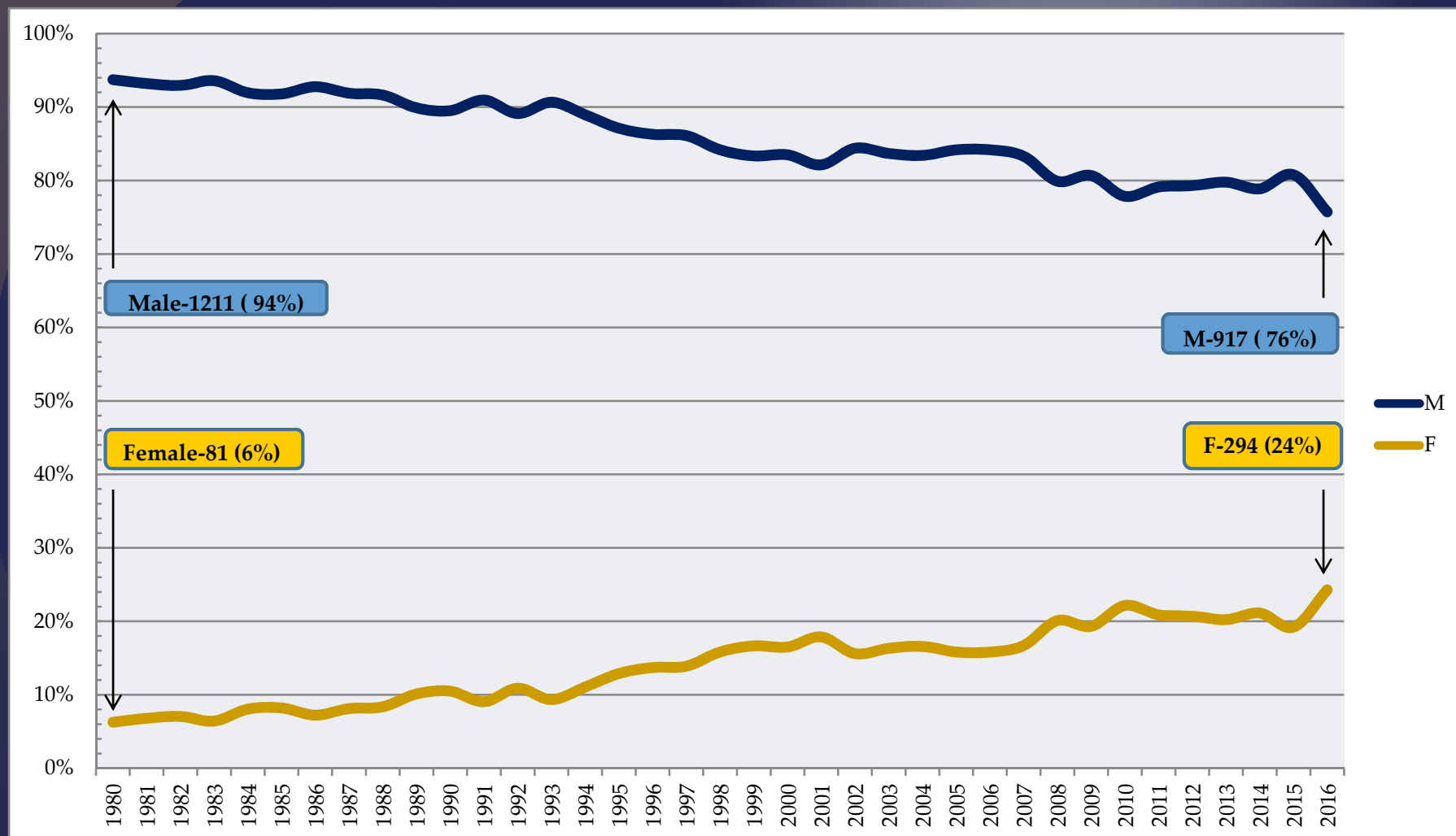


USNA compared to Peers 4 Year Graduation Rates 2009-11 by Race and Ethnicity





Historical Enrollment by Class

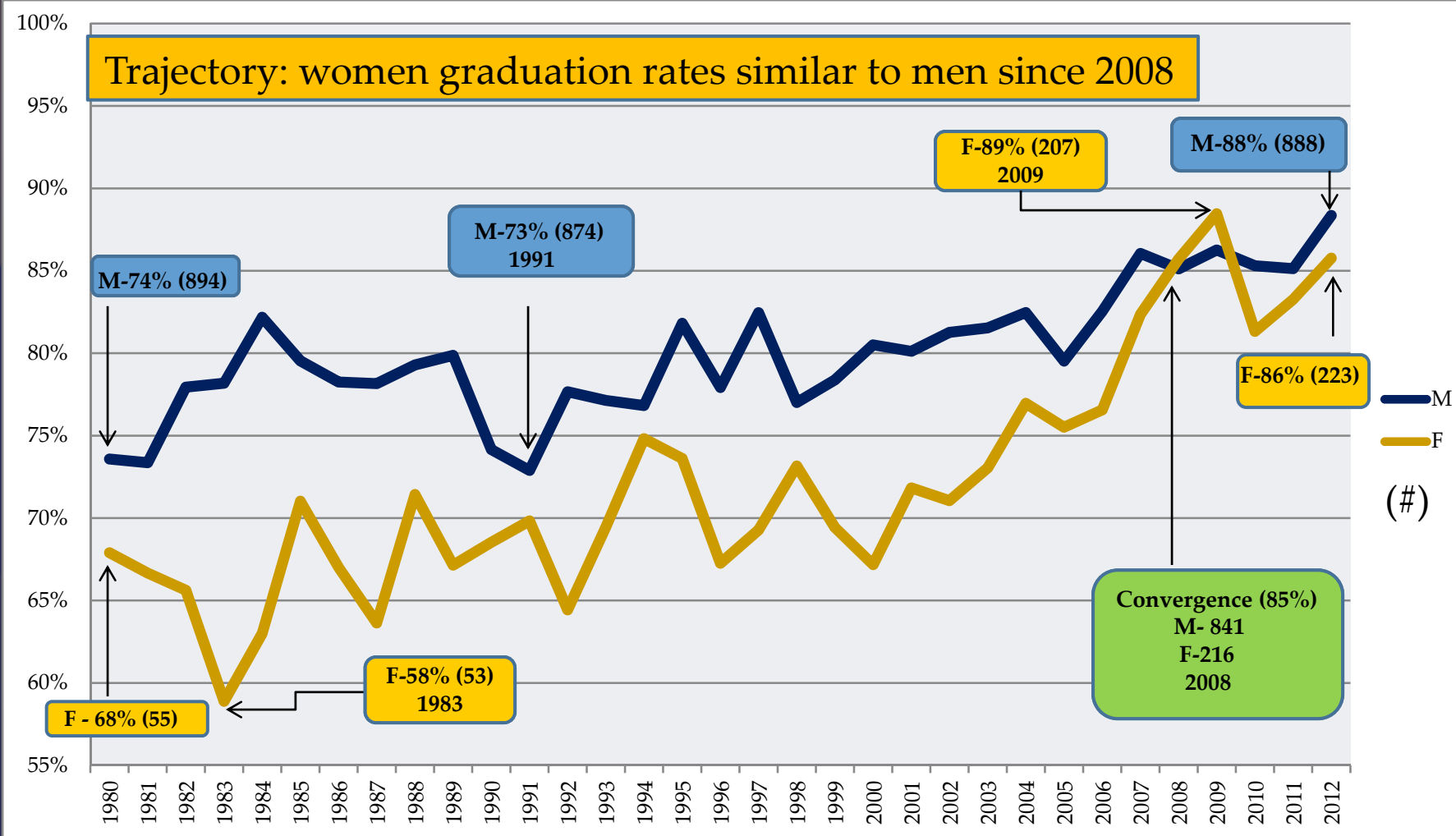


Source: USNA Institutional Research

FOUO
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Graduation Rates by Gender



Proportional Outcomes Index (POI): An index of 1.0 means proportional representation (i.e. “equity”) for the educational outcome being analyzed (e.g. graduation completion) does exist for targeted group in comparison to the overall population.

Gender Graduation Outcomes

Classes 2008 - 2012					POI (Graduation) = %Grad Total / %Enrollment Total		
Gender	#Grad Total	#Enrolled (I-Day) Total	#Separated Total	Grad Rate	%Enroll	%Grad Total	POI
Female	1077	1271	193	84.7%	20.6%	20.4%	0.99
Male	4209	4891	682	86.1%	79.4%	79.6%	1.00
Total	5286	6162	875	85.8%	100.0%		

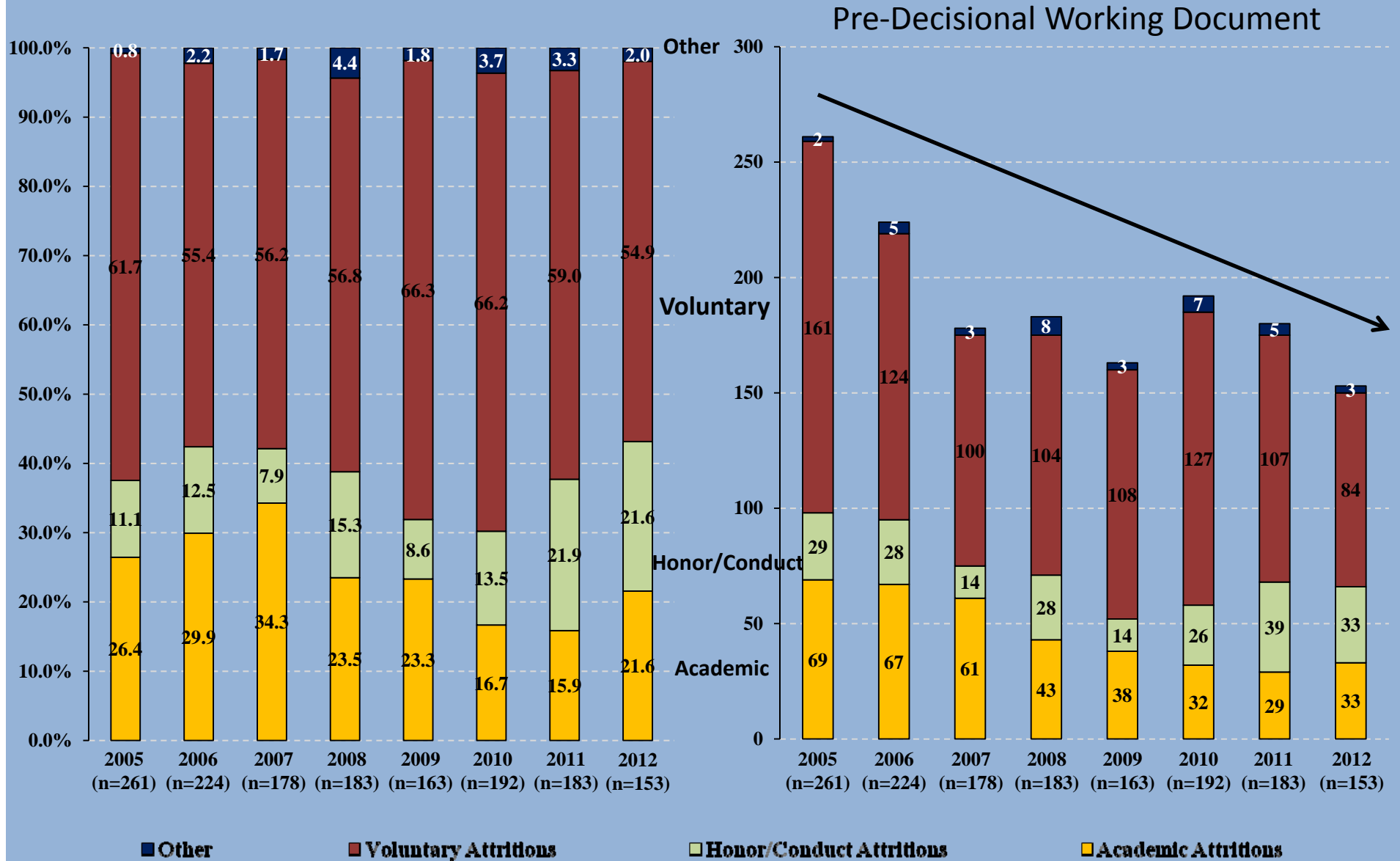
Trajectory: Graduation Rates of women have increased over time in percentage and absolute total number. From 2008 – 2012, women graduated at rates on par and equitable with men.

Proportional Outcomes Index (POI): An index of **1.0** means **proportional representation** (i.e. “equity”) for the educational outcome being analyzed (e.g. graduation completion) **does exist** for targeted group in comparison to the overall population.

<u>Race/Ethnicity</u> <u>Graduation Rates</u>		Classes 2009-2012			POI (Graduation) = %Grad Total / %Enrollment Total		
Categories	#Grad Total	#Enrolled (I-Day) Total	#Separated Total	Grad Rate	%Enroll	%Grad Total	POI
Other Race/Ethnic Groups (OREG)	949	1169	220	81.2%	23.7%	22.4%	0.95
White	3199	3665	466	87.3%	74.4%	75.6%	1.02
Decline to Respond	37	44	7	84.1%	0.9%	0.9%	0.98
International	44	47	3	93.6%	1.0%	1.0%	1.09
Total	4229	4925	696	85.9%	100.0%		
OREG Composition				Grad Rate	%Enroll	%Grad Total	POI
African American	158	219	61	72.1%	4.4%	3.7%	0.84
Asian	119	141	22	84.4%	2.9%	2.8%	0.98
Hispanic	431	517	86	83.4%	10.5%	10.2%	0.97
Multi-Races	197	239	42	82.4%	4.9%	4.7%	0.96
Native American	21	28	7	75.0%	0.57%	0.5%	0.87
Native Hawaiian/ Pacific Islander	23	25	2	92.0%	0.51%	0.5%	1.07

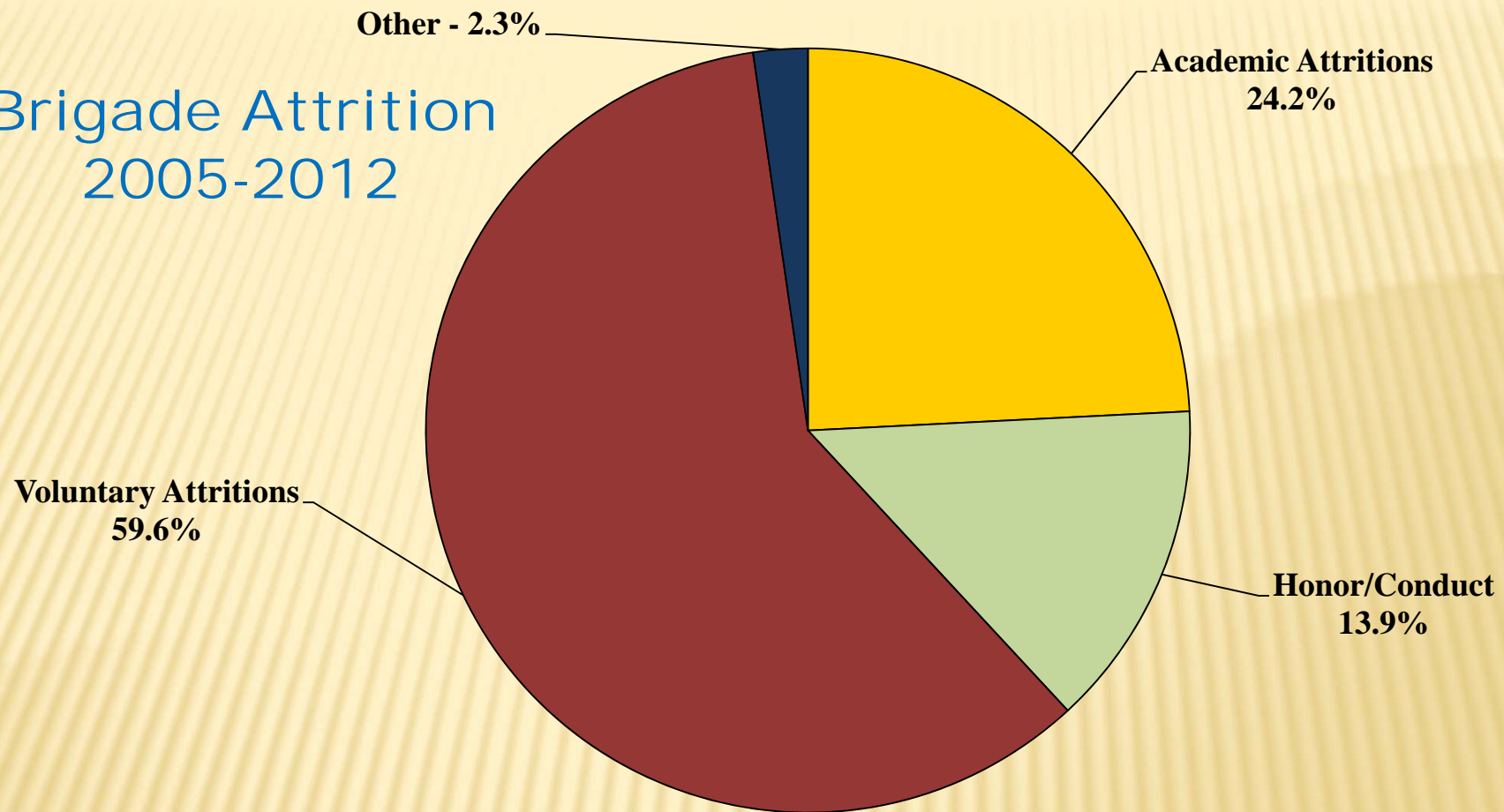
POI disparities

2005-2012 Percent of Total Attritions by Category (N=1,537)



Data as of 15-OCT-2012. Academic Attritions include PE Deficiency, Voluntary Attritions include Plebe Summer resignations, Honor/Conduct Attritions include those who were Qualified Resignations, and Other includes medical discharges and the deceased.

Brigade Attrition 2005-2012

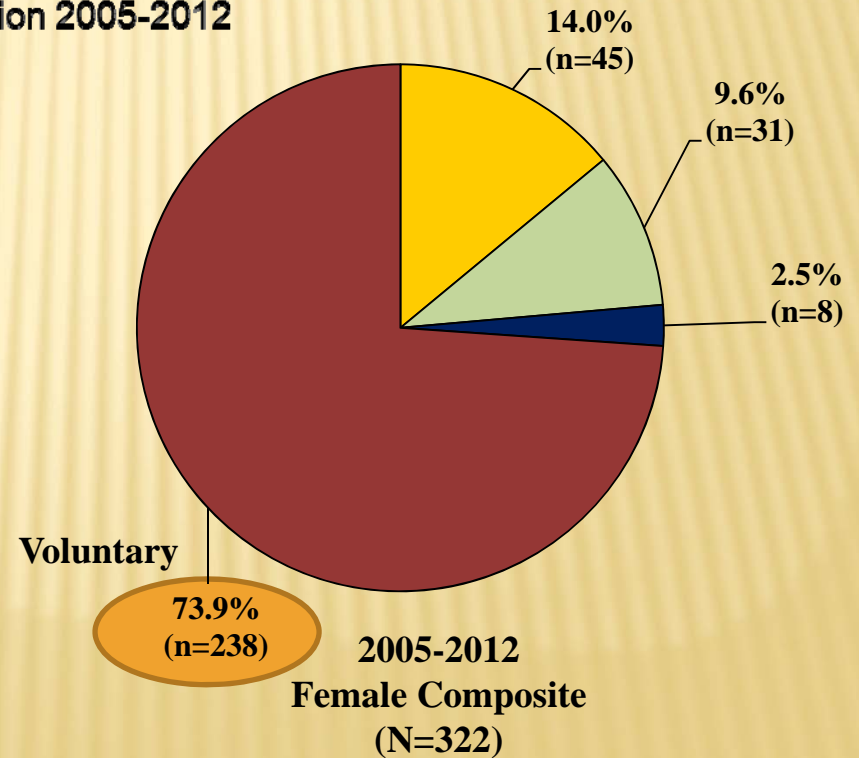
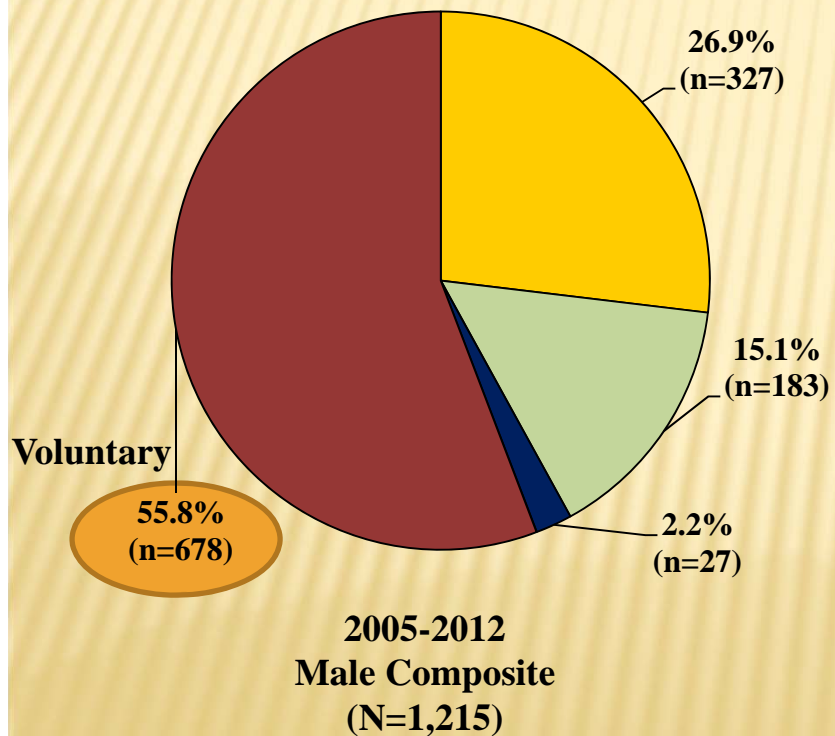
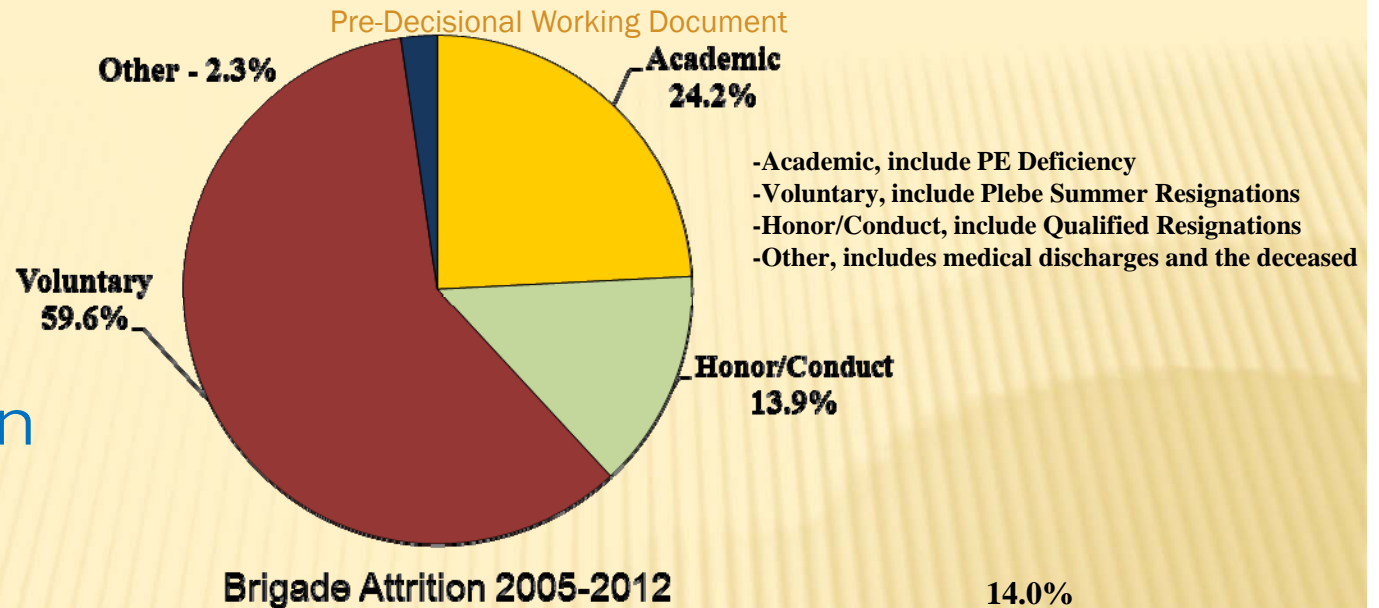


2005-2012 Brigade Composite of Attritions by Category (Total = 1,537 Midshipmen)

Data as of 15-OCY-2012

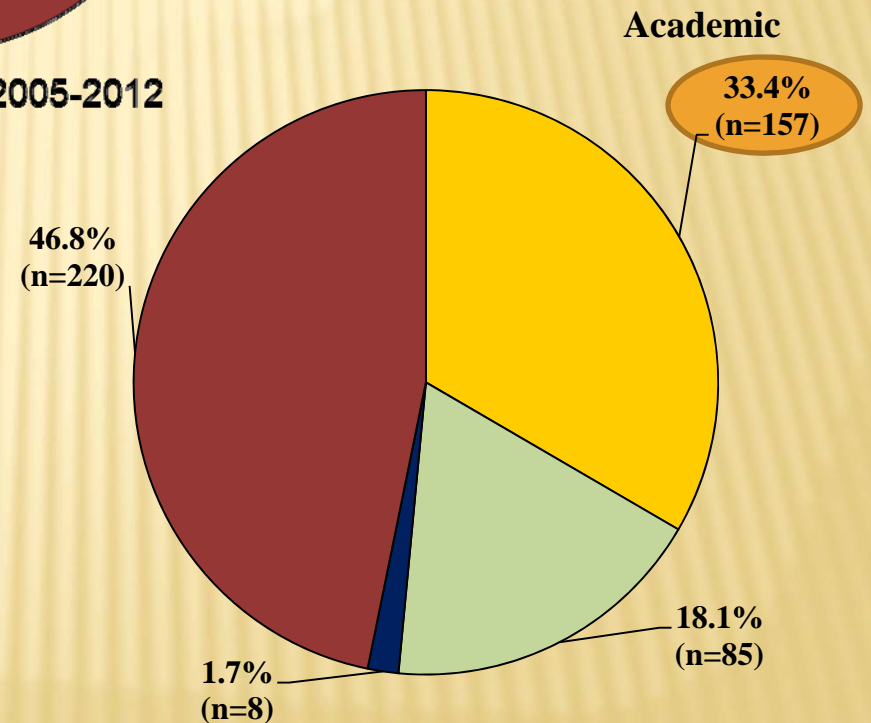
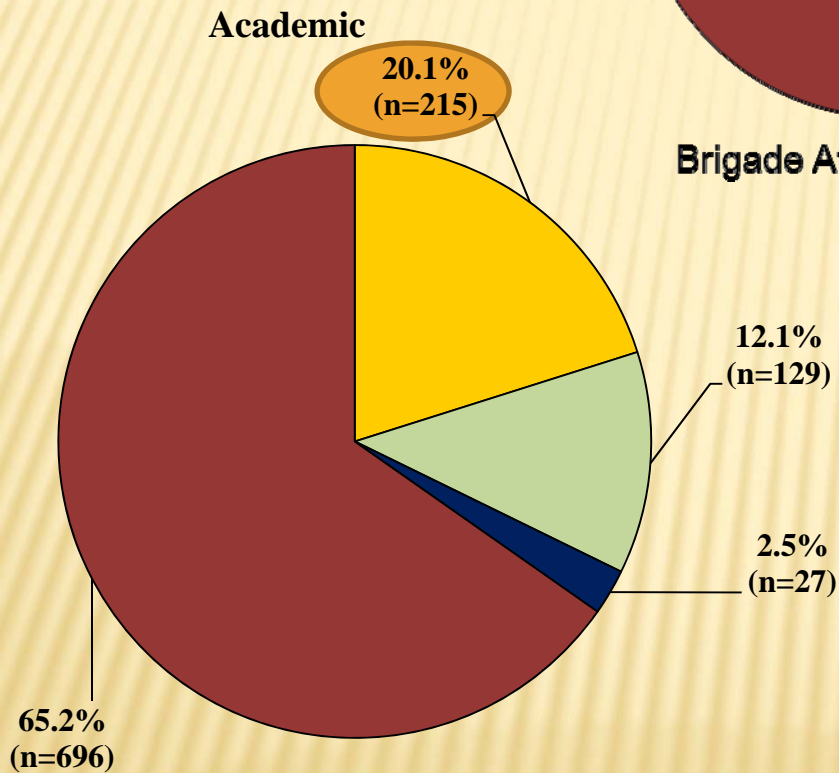
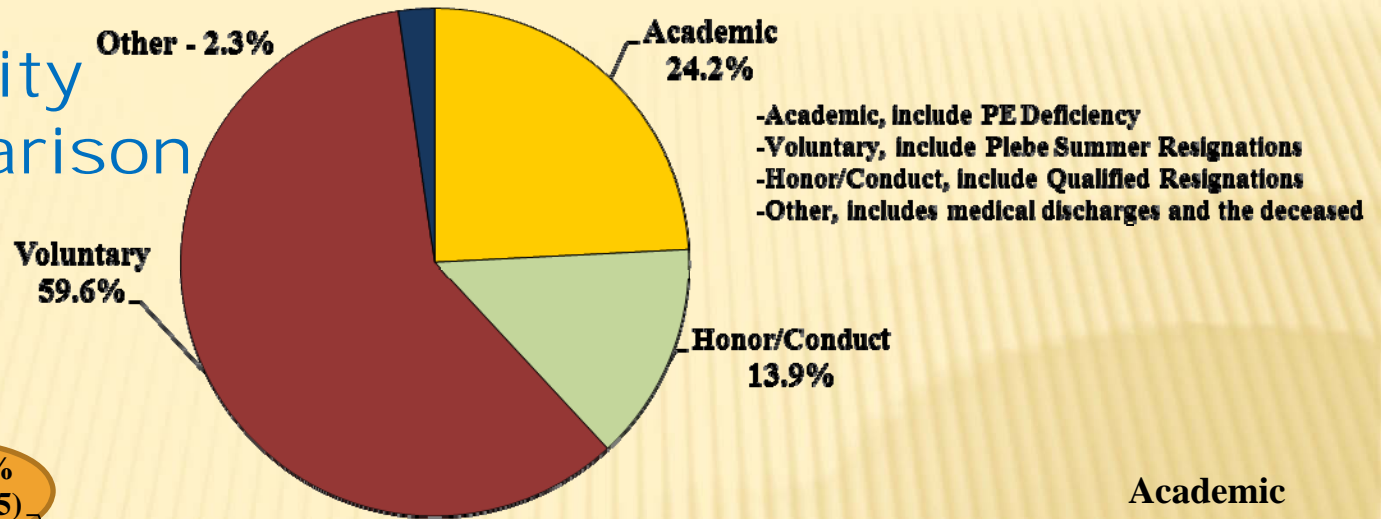
- (1) Academic Attritions include PE Deficiency,
- (2) Voluntary Attritions include Plebe Summer resignations,
- (3) Honor/Conduct Attritions include those who were Qualified Resignations,
- (4) Other includes medical discharges and the deceased.

Gender Attrition Comparison



Race/Ethnicity Attrition Comparison

Pre-Decisional Working Document



Feeder Source Attrition Comparison

Pre-Decisional Working Document

Other - 2.3%

Academic
24.2%

- Academic, include PE Deficiency
- Voluntary, include Plebe Summer Resignations
- Honor/Conduct, include Qualified Resignations
- Other, includes medical discharges and the deceased

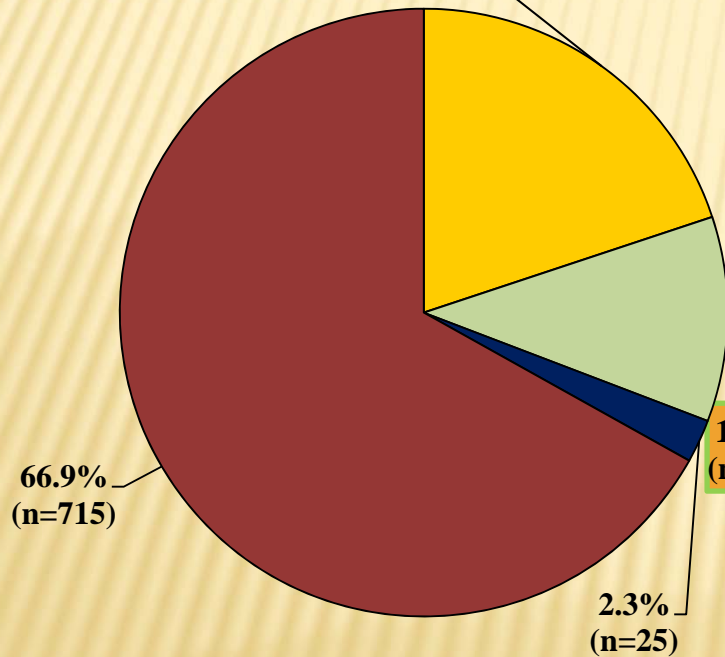
Voluntary
59.6%

Honor/Conduct
13.9%

Brigade Attrition 2005-2012

Academic

19.9%
(n=213)



2005-2012
Direct Composite
(N=1,069)

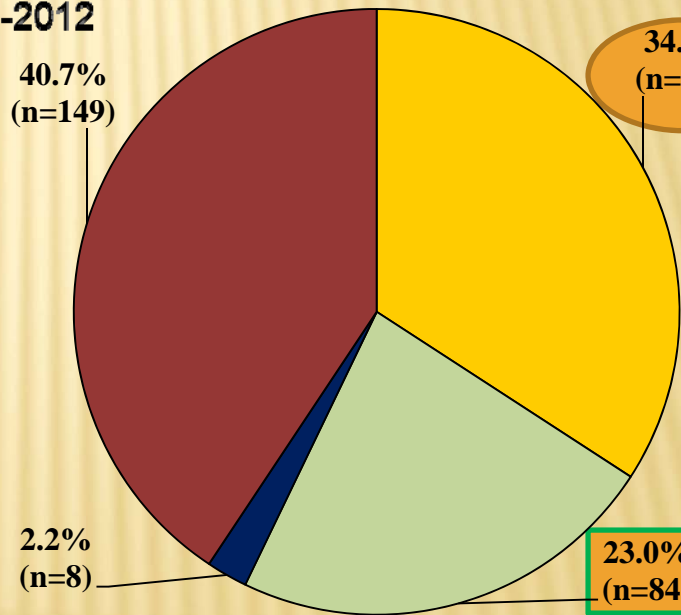
Academic

34.2%
(n=125)

40.7%
(n=149)

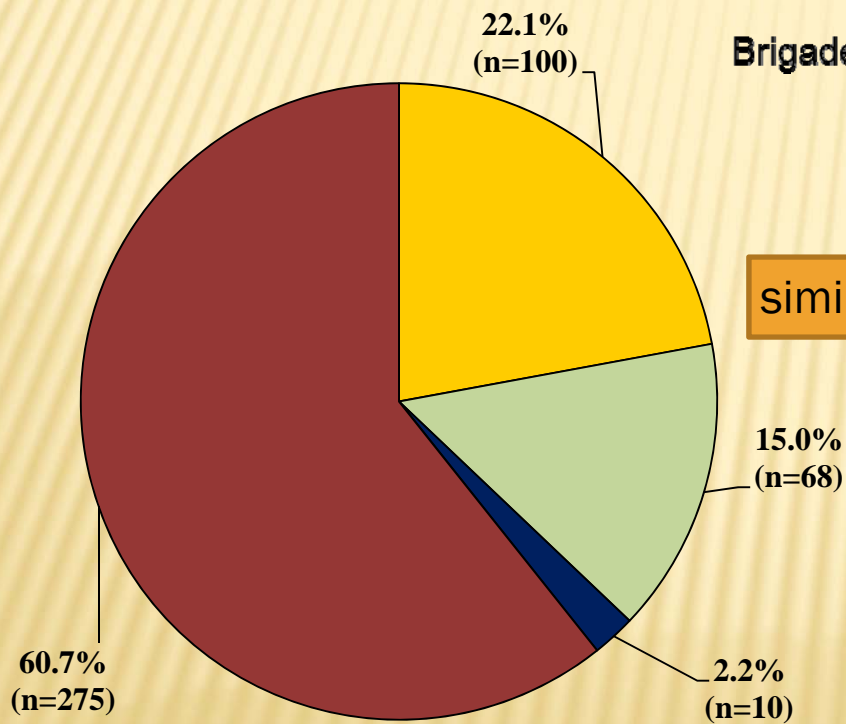
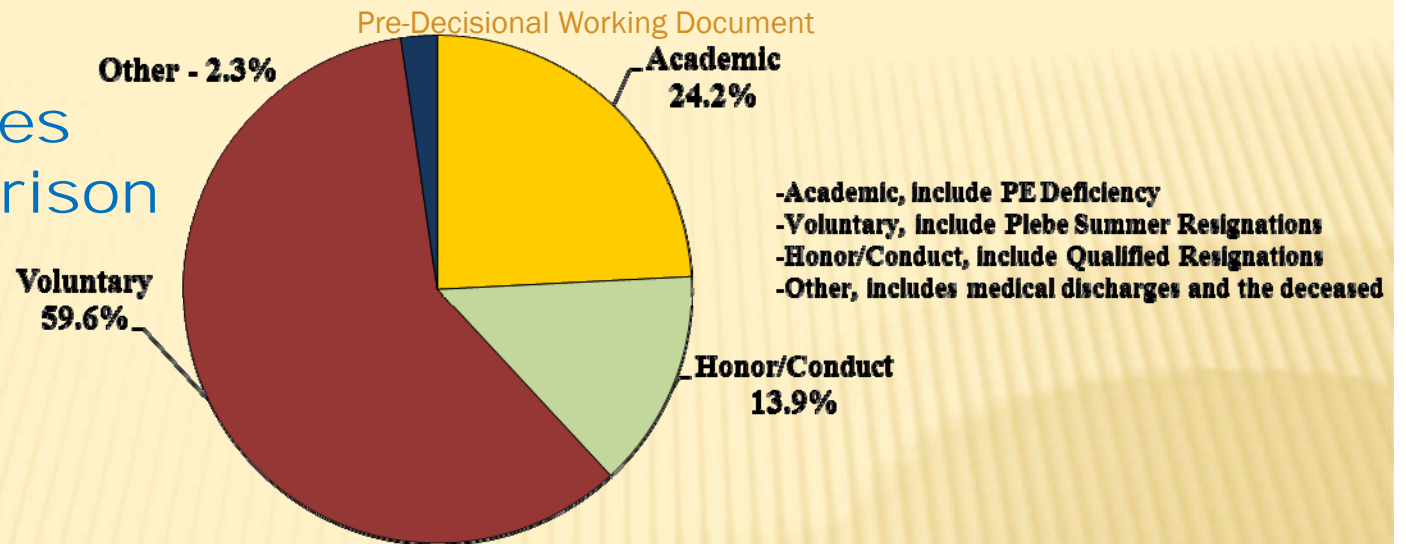
2.2%
(n=8)

23.0%
(n=84)



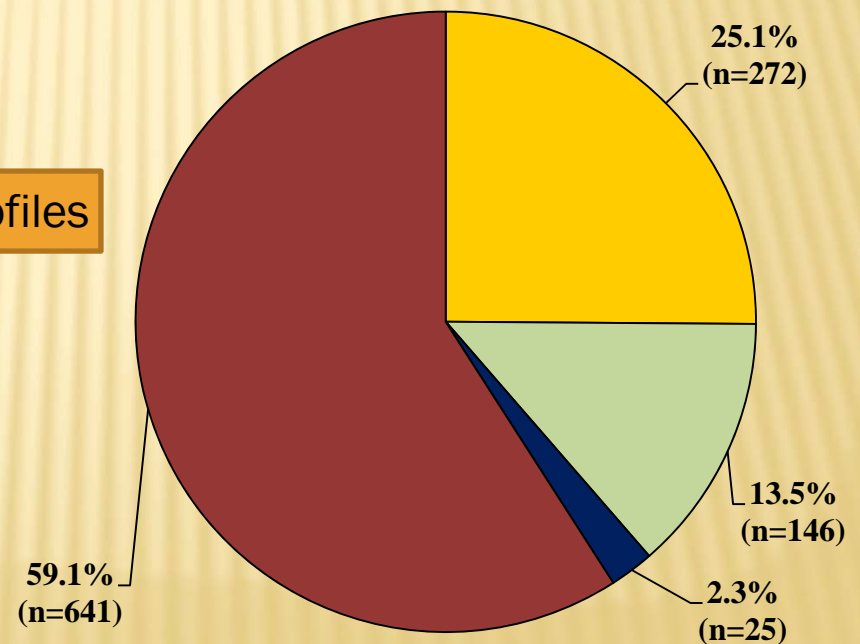
2005-2012
NAPS Composite
(N=366)

Coded Athletes Attrition Comparison



**2005-2012
Coded Athlete Status Composite
(N=453)**

similar profiles



**2005-2012
Non-Coded Athlete Status Composite
(N=1,067)**

5 U.S.C. §552(b)(5)



Questions?

USNA Proportional Outcomes Study

SLT Deep Dive



CAPT Pat L. Williams, Ph.D., PHR
Chief Diversity Officer, U.S. Naval Academy
<http://www.usna.edu/Diversity>

17 Nov 15

Equity Study and Assessment Committee (ESAC)

Purpose

- To assess the equity of **access and achievement** of various midshipmen demographic sub-groups from multiple perspectives
- To recommend policies and procedures to address identified disparities in outcomes

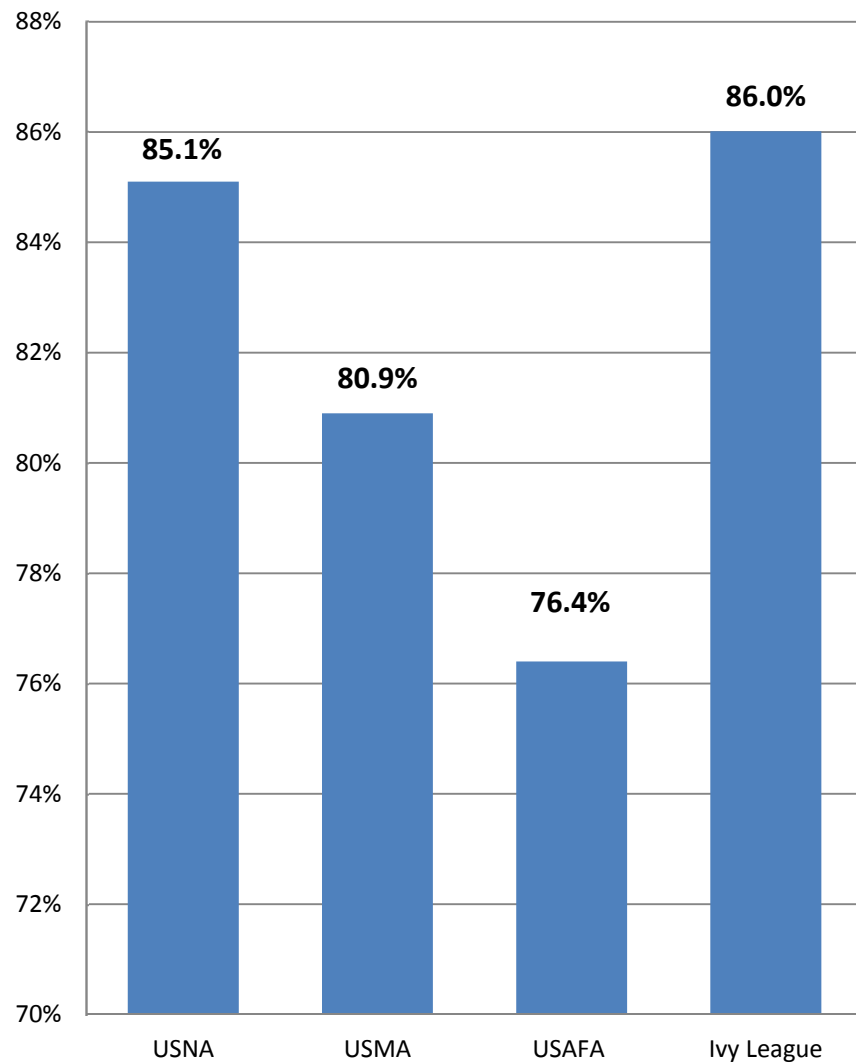
Context

- Over the 47-month USNA Program
- Equity is about **Opportunity** and **Outcomes**

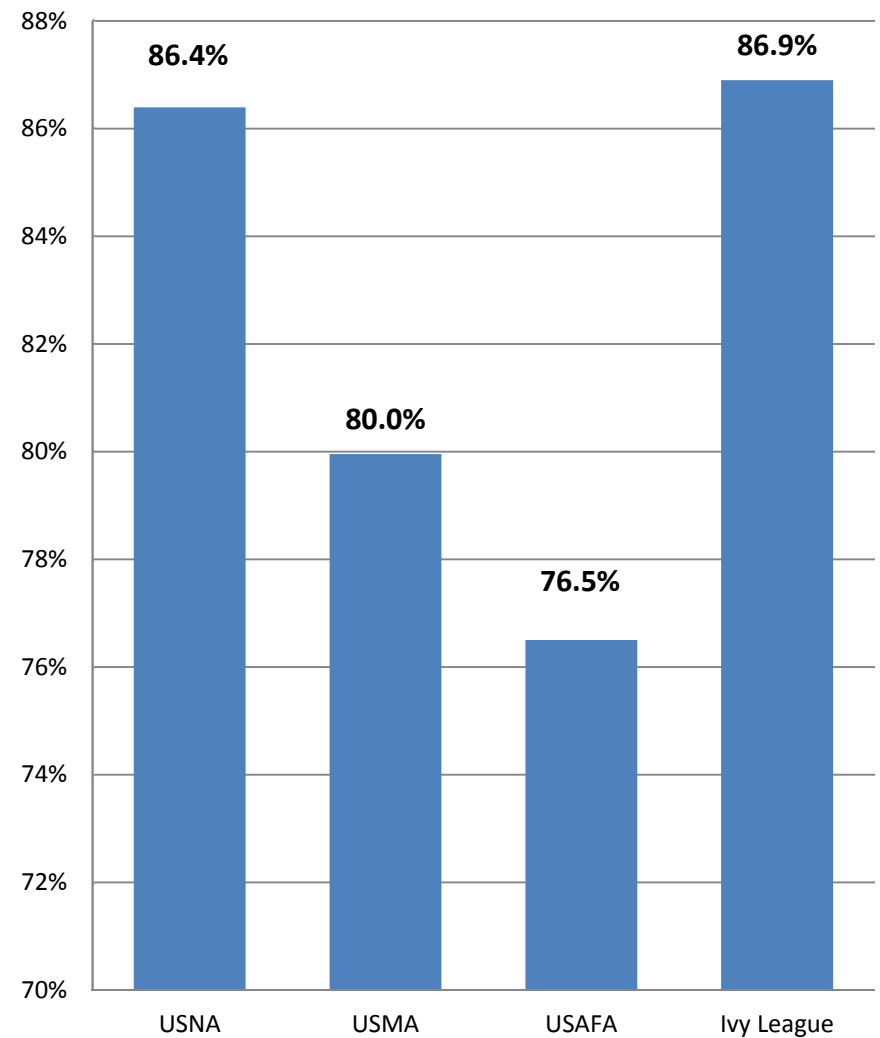
What is Equity?

- Equity
 - The proportion of a midshipmen-group in the general population in comparison to the proportion of this same midshipmen-group in the target population.
- **Example**
 - If the proportion of females in a class at **entry** (I-Day) is 20% and the proportion of females in that class at **graduation** is 20%, then there is equity.
- Data is disaggregated by race / ethnicity (& gender).
- Equity is inextricably linked to delivery of mission to develop, morally, mentally, and physically, ethical leaders of character & consequence.

**USNA compared to Peers
Total 4 Year Graduation Rates 2009-11**



**USNA compared to Peers
Total 4 Year Graduation Rates 2012-13**



Competitive Graduation Rates!

Proportional Outcomes Index (POI): An index of 1.0 means proportional representation (i.e., “equity”) for the educational outcome being analyzed (e.g., graduation completion) does exist for targeted group **in comparison** to the overall population.

Gender Graduation Outcomes

Classes 2009 - 2012

$$\text{POI (Graduation)} = \frac{\% \text{Grad Total}}{\% \text{Enrollment Total}}$$

Categories	%Enroll	%Grad Total	POI
Female	20.7%	20.4%	0.99
Male	79.3%	79.6%	1.00

Classes 2013 - 2015

$$\text{POI (Graduation)} = \frac{\% \text{Grad Total}}{\% \text{Enrollment Total}}$$

Categories	%Enroll	%Grad Total	POI
Female	20.2%	19.8%	0.98
Male	79.8%	80.2%	1.00

Trajectory: Despite a slight disparity in the proportional outcomes index, the graduation rates of women have increased over time in percentage and absolute total number. From 2009 – 2015, women graduated at rates on par and equitable with men.

Proportional Outcomes Index (POI): An index of **1.0** means proportional representation (i.e., “equity”) for the educational outcome being analyzed (e.g., graduation completion) does exist for targeted group in comparison to the overall population.

Race/Ethnicity
Graduation Rates

Classes 2009-2012

Categories	%Enroll	%Grad Total	POI
Other Race/Ethnic Groups (OREG)	23.7%	22.4%	0.95
White	74.4%	75.6%	1.02

OREG Composition	%Enroll	%Grad Total	POI
African American	4.4%	3.7%	0.84
Asian	2.9%	2.8%	0.98
Hispanic	10.5%	10.2%	0.97
Multi-Races	4.9%	4.7%	0.96

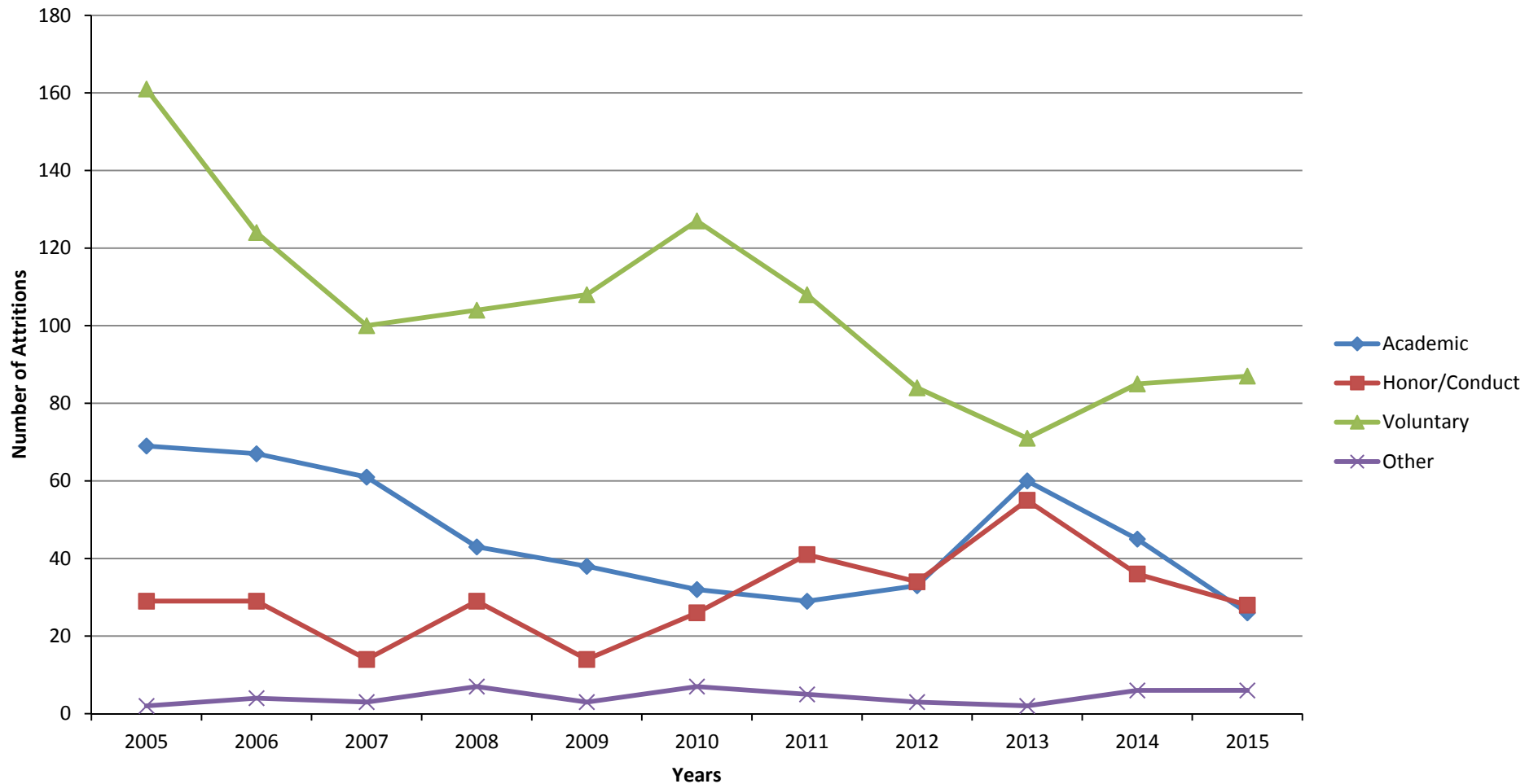
Classes 2013-2015

Categories	%Enroll	%Grad Total	POI
Other Race/Ethnic Groups (OREG)	35.0%	32.6%	0.93
White	65.0%	67.4%	1.04

OREG Composition	%Enroll	%Grad Total	POI
African American	7.9%	6.6%	0.84
Asian	4.7%	4.8%	1.02
Hispanic	13.6%	12.6%	0.93
Multi-Races	8.1%	7.5%	0.93

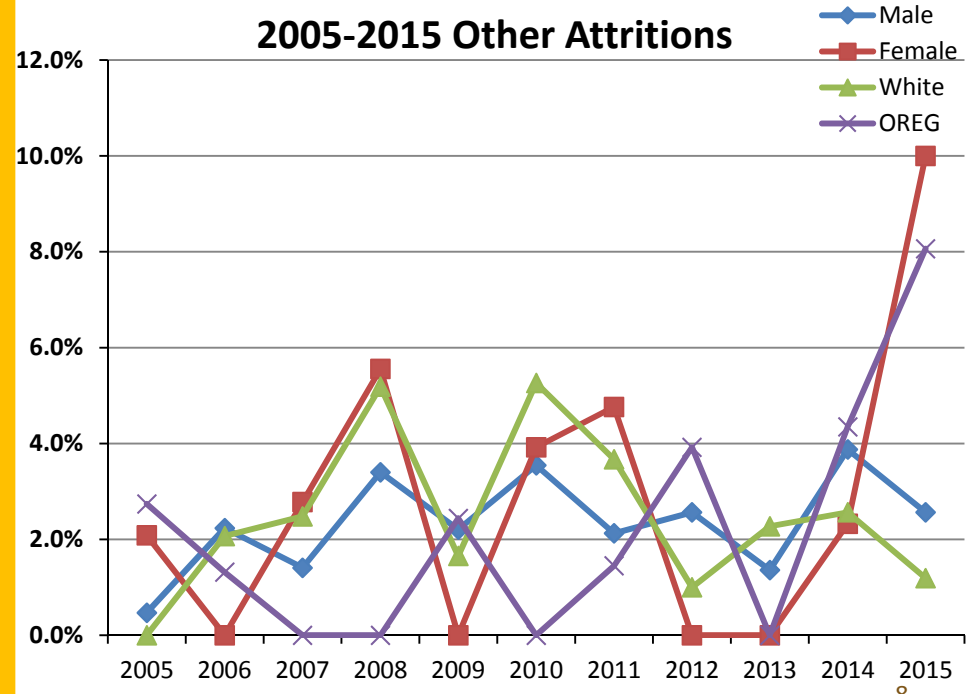
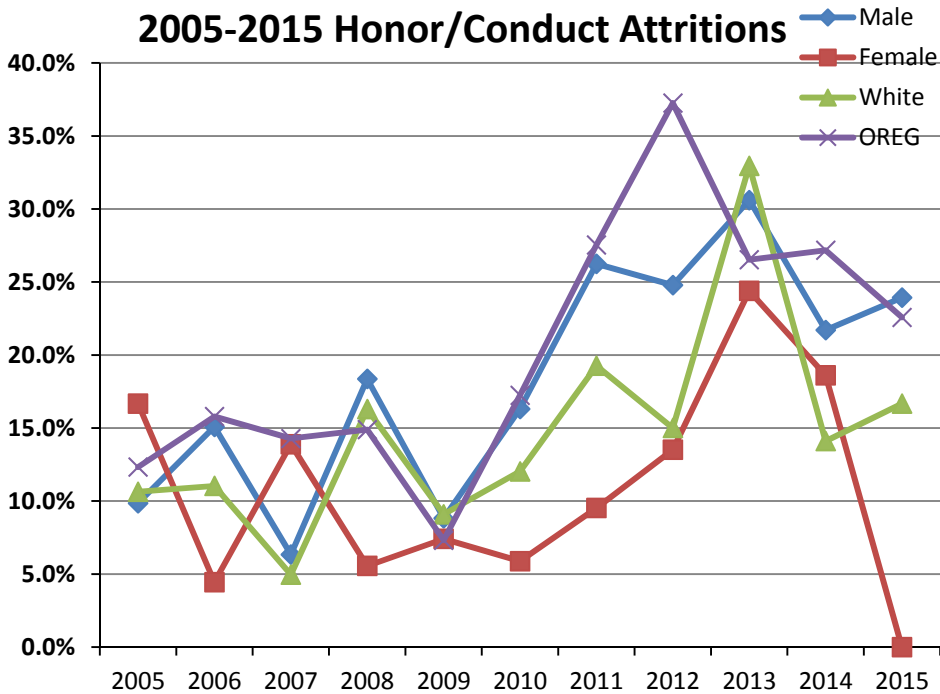
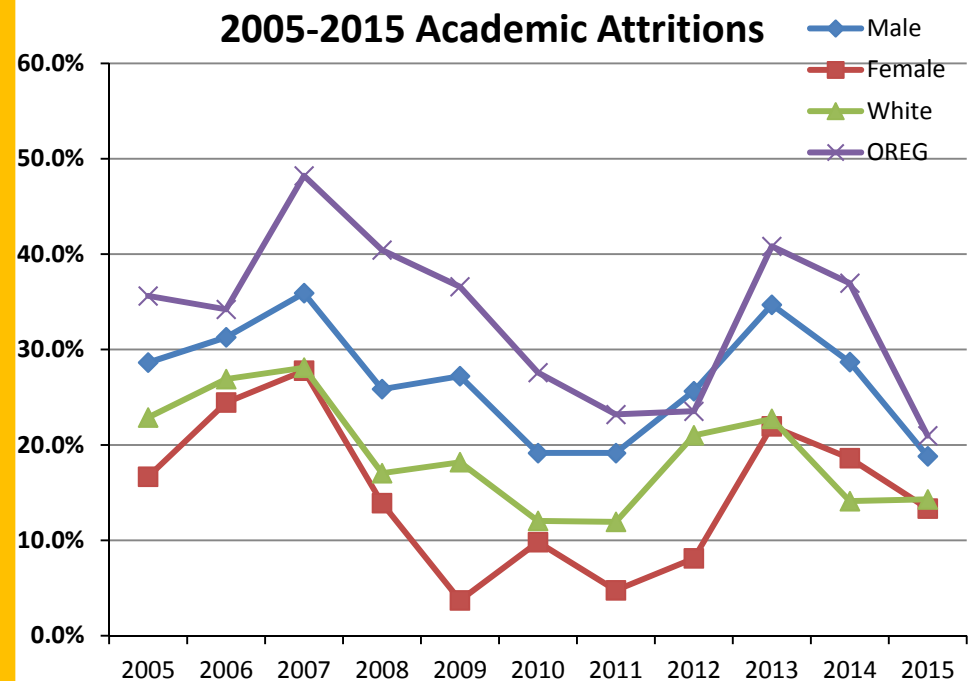
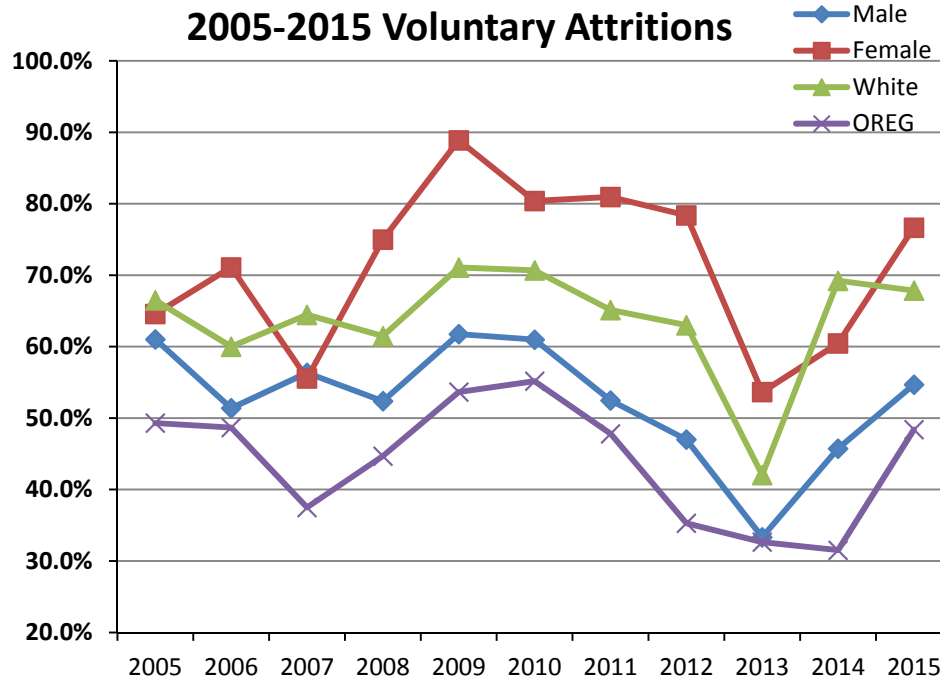
The gap in the proportional outcomes index widened between Whites and OREG from 2013-15. The largest disparity noticed is for African Americans.

2005-2015 Brigade Composite of Attritions by Category (Total = 2045 Midshipmen)



Data as of 26-OCT-2015

- (1) Academic Attritions includes PE Deficiency
- (2) Voluntary Attritions include Plebe Summer Resignations
- (3) Honor/Conduct Attritions includes those who were Qualified Resignations
- (4) Other includes medical discharges and the deceased



5 U.S.C. §552(b)(5)

Questions?

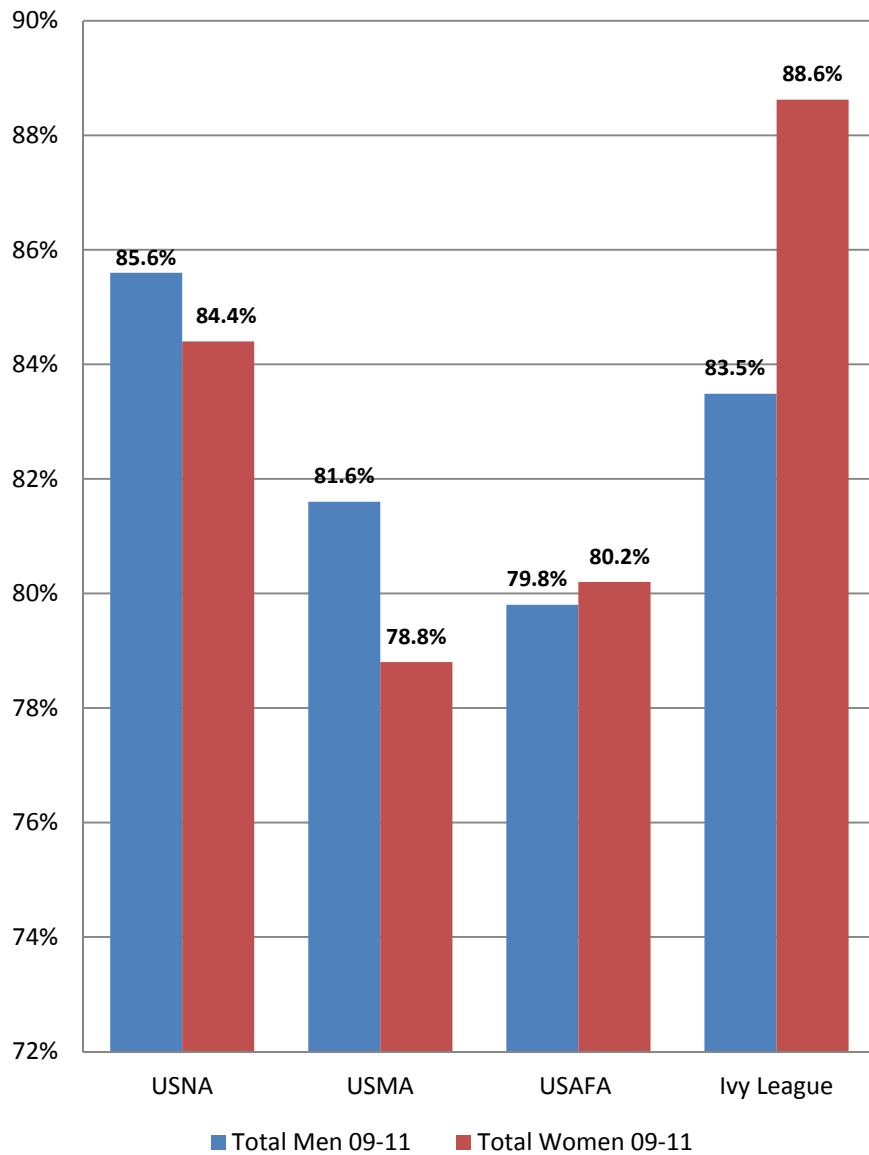
<http://www.usna.edu/Diversity>



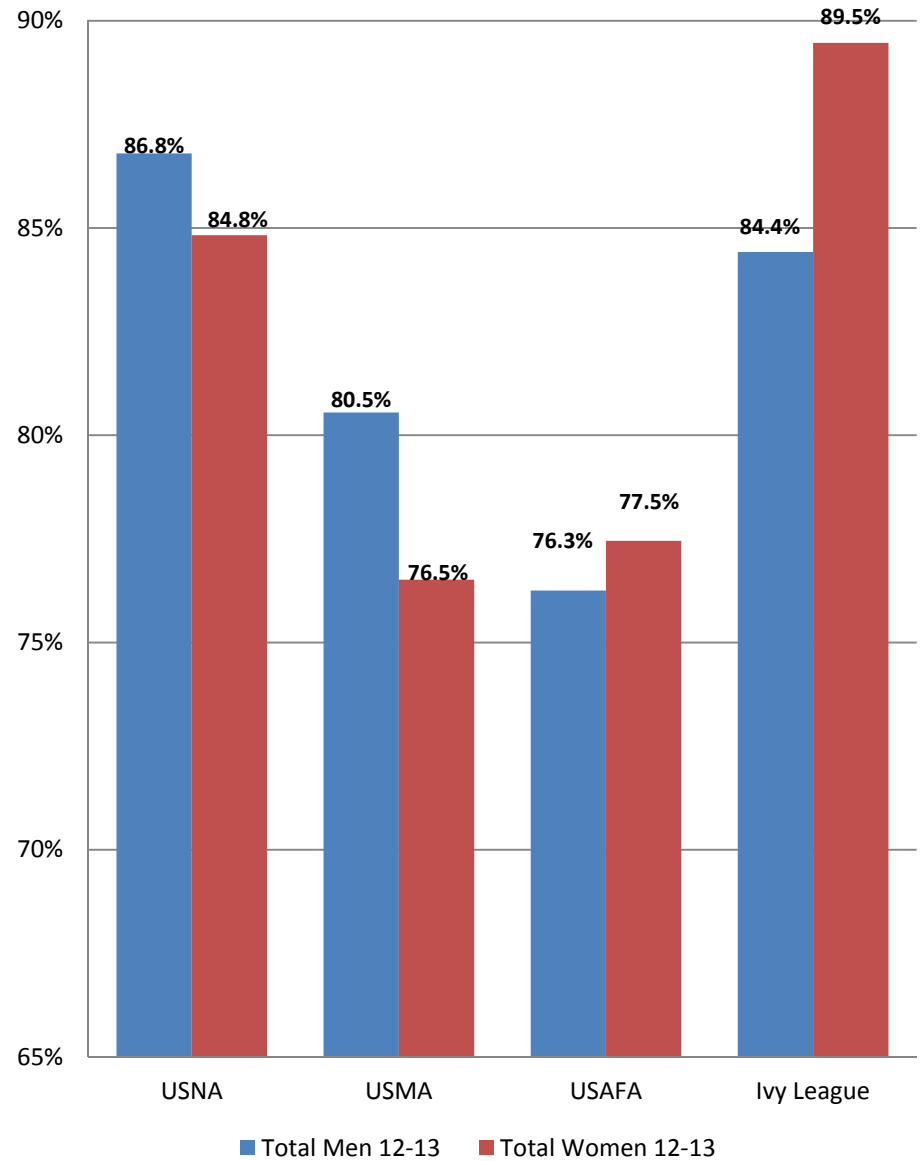
Backup

<http://www.usna.edu/Diversity>

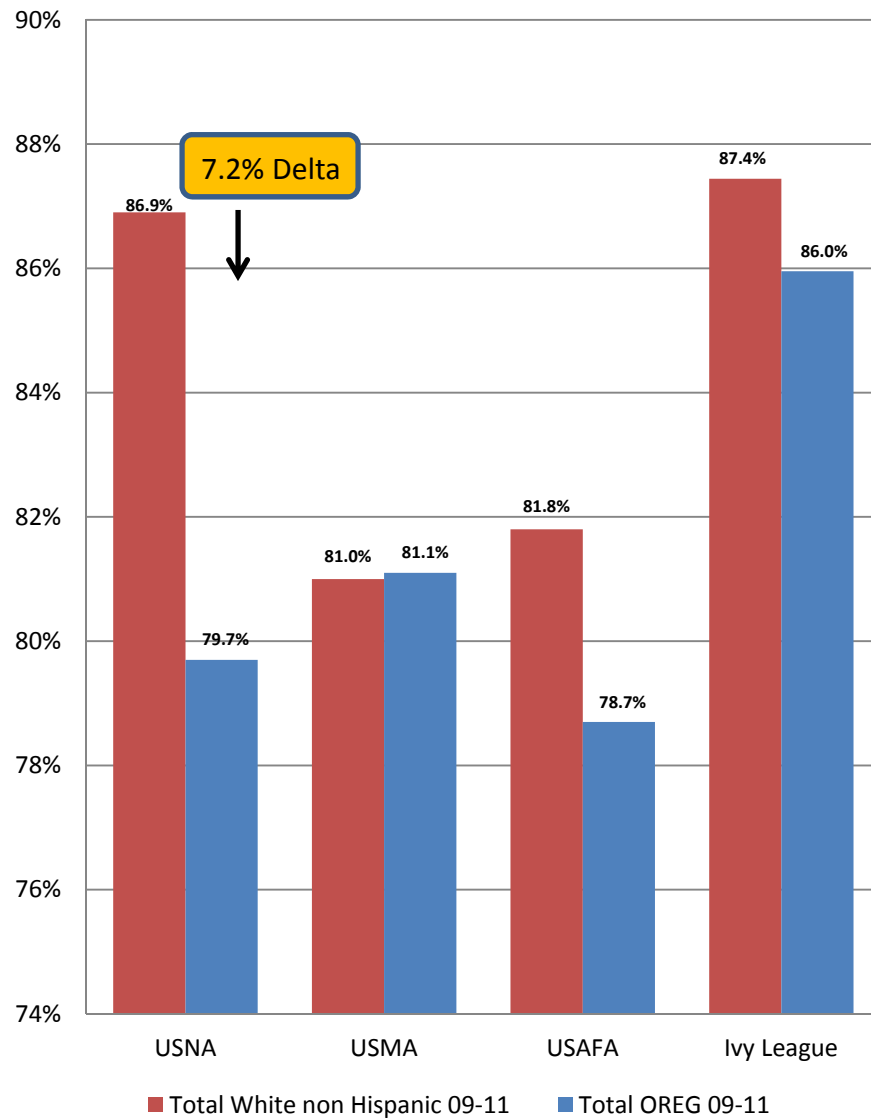
**USNA compared to Peers
4 Year Graduation Rates 2009-11 by Gender**



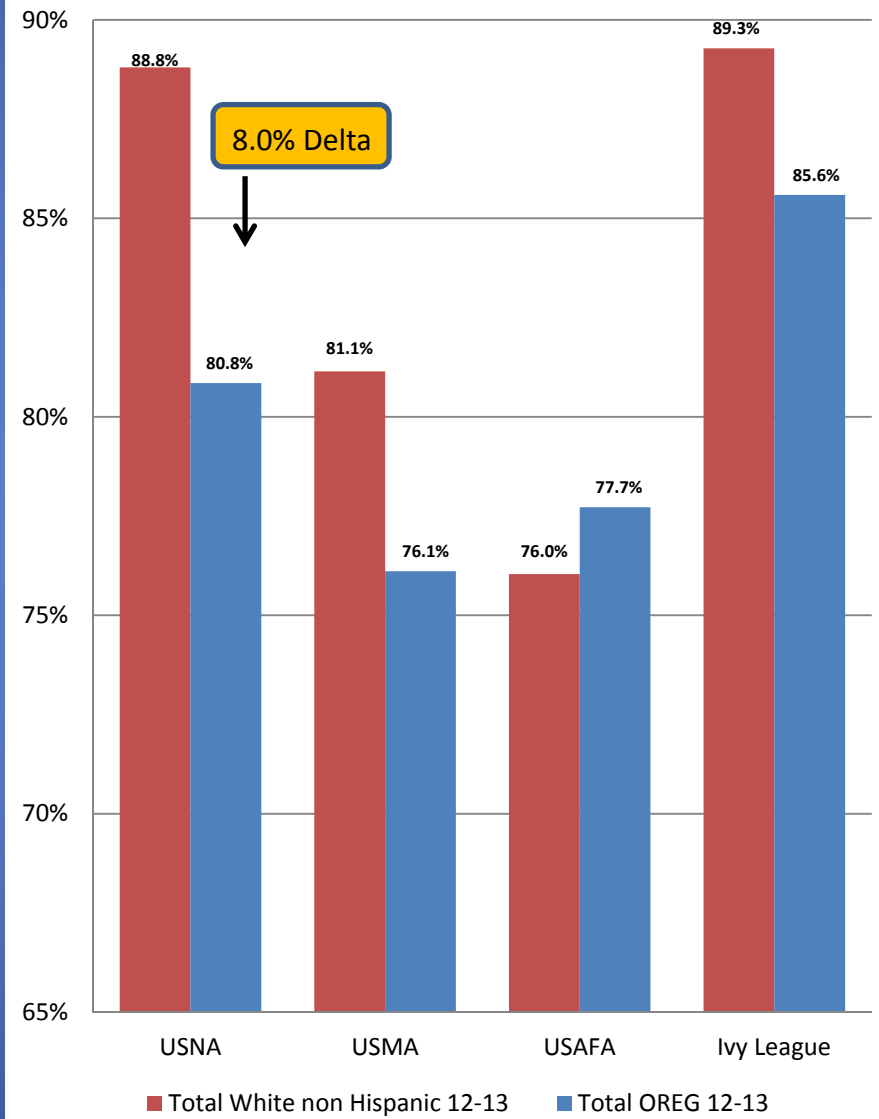
**USNA compared to Peers
4 Year Graduation Rates 2012-13 by Gender**



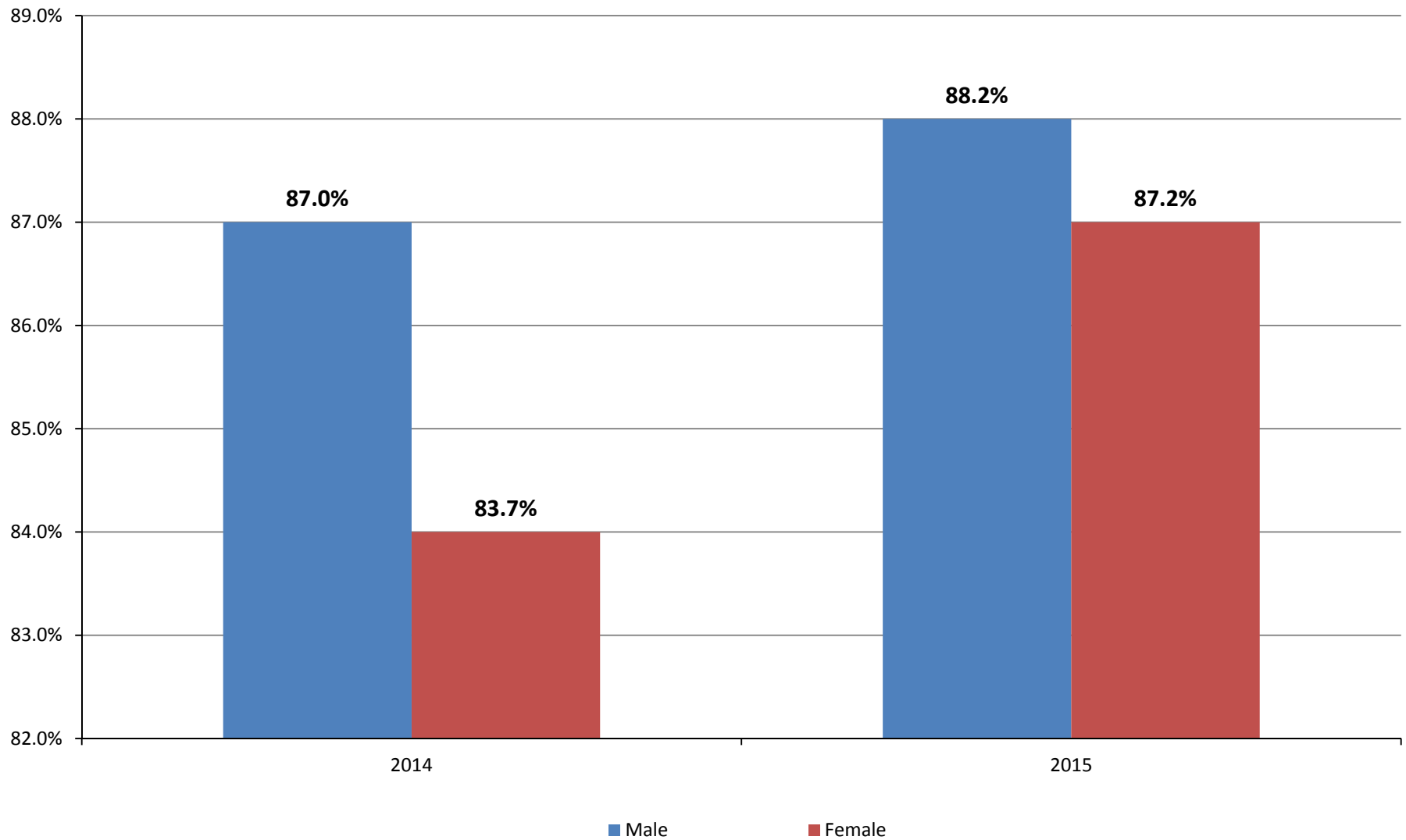
**USNA compared to Peers
4 Year Graduation Rates 2009-11 by Race and
Ethnicity**



**USNA compared to Peers
4 Year Graduation Rates 2012-13 by Race and
Ethnicity**

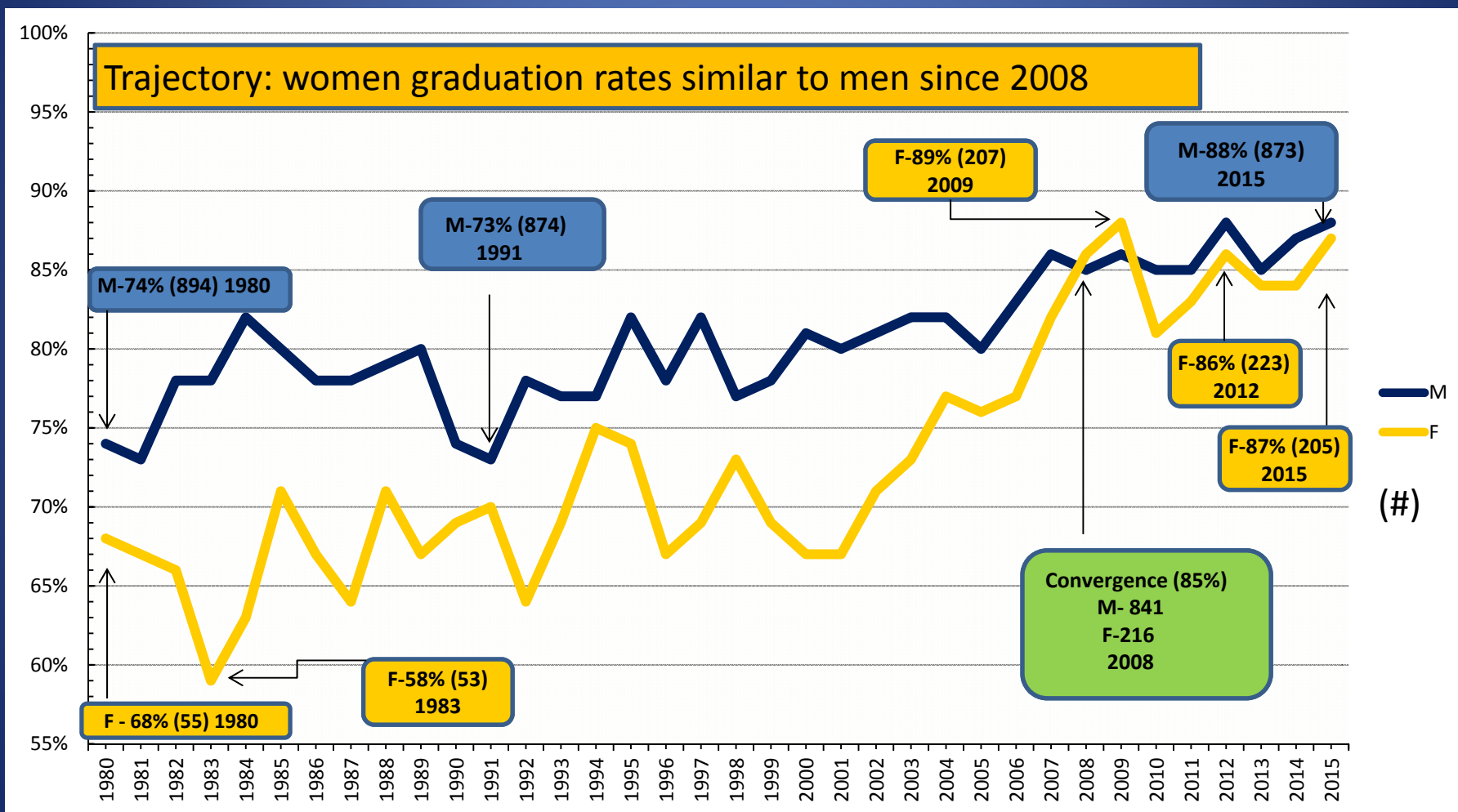


2014-2015 Graduation Rates

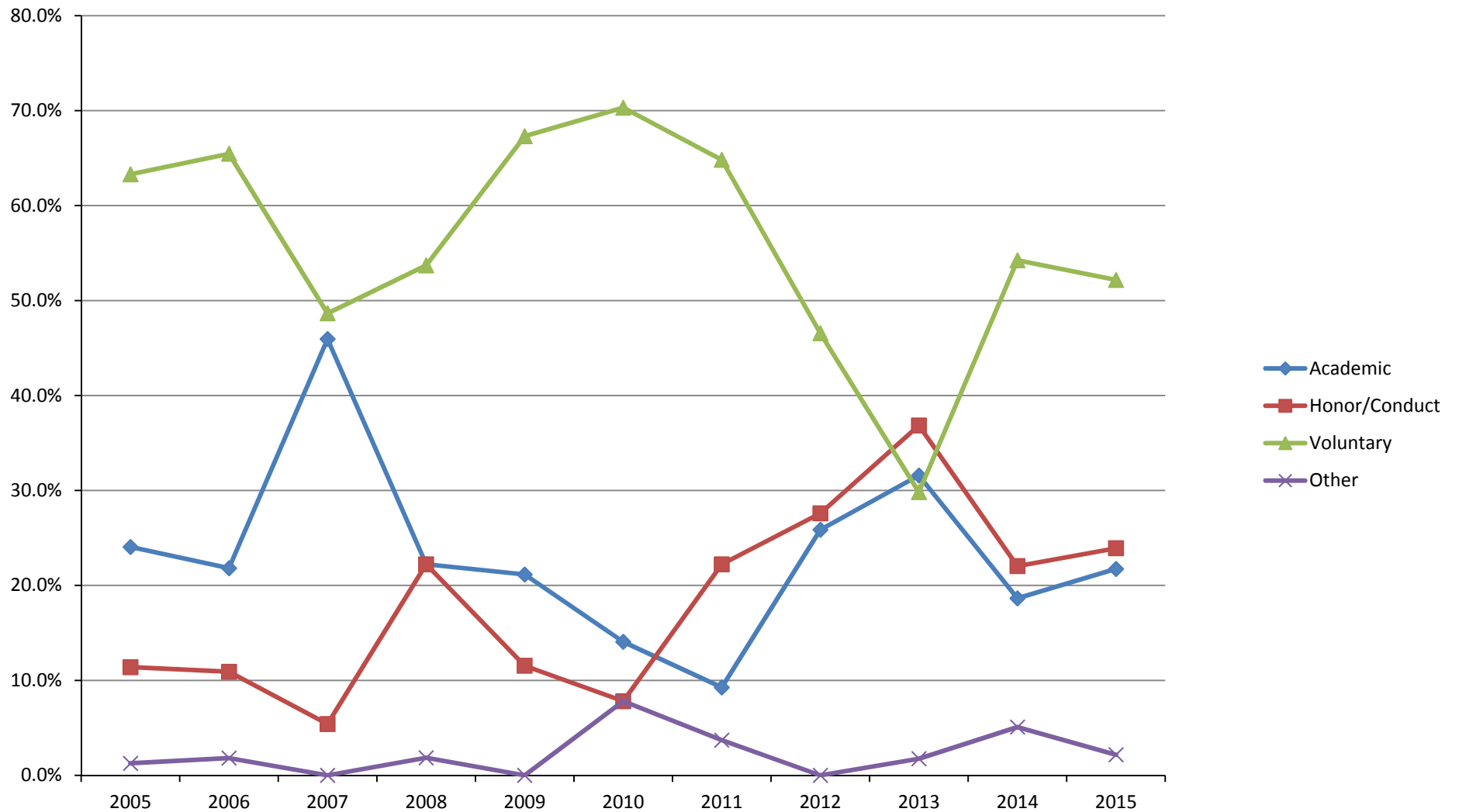




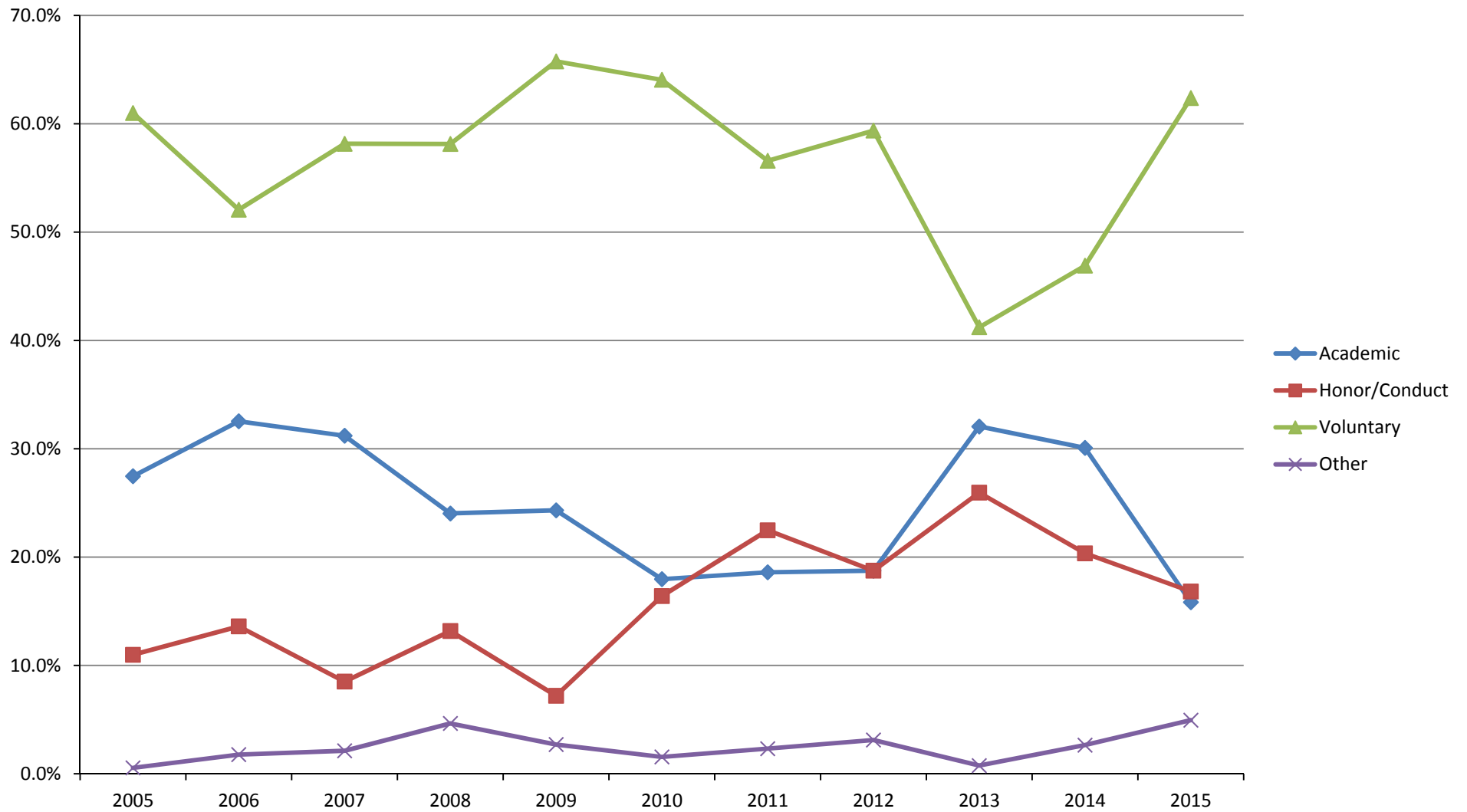
Graduation Rates by Gender



Coded Athlete Attrition Comparison



Non-Coded Athlete Attrition Comparison





DEPARTMENT OF THE NAVY
UNITED STATES NAVAL ACADEMY
121 BLAKE ROAD
ANNAPOLIS MARYLAND 21402-1300

5420
Ser 28/654
23 Nov 15

MEMORANDUM

From: Superintendent, United States Naval Academy
To: Academy Effectiveness Board

Subj: USNA PROPORTIONAL OUTCOMES STUDY

Ref: (a) USNA Proportional Outcomes Study SLT Deep Dive of 17 Nov 15

1. Reference (a) and the associated 17 November 2015 Senior Leadership Team (SLT) discussion provided a solid assessment of the equity of access and achievement of various midshipmen demographic sub-groups from multiple perspectives. I appreciate CAPT Williams' and the Academy Effectiveness Board's (AEB) efforts in conducting this study, and concur with the assessment that the Academy has no significant issues across the demographic sub-groups. Therefore, as a result of this study, I do not direct that any policy, procedural or programmatic changes be made at this time.

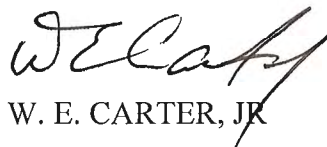
2. Recruiting, admitting and graduating a talented and diverse Brigade of Midshipmen is a strategic imperative of the Naval Academy. Accordingly, the AEB is directed to continue assessment activities as they relate to access and achievement of various midshipmen demographic sub-groups. Specifically:

a. Reference (a) indicated that the Proportional Outcomes Index (POI) for African American graduation rates was statistically significant. Request further disaggregated data analysis, with an effort on controlling key variables such as entering academic aptitude, to better understand attrition patterns and causal factors for a lower African American POI. Findings and analysis should be briefed to the SLT by April 2016.

b. Continue proportional outcomes studies biennially. In addition to graduation success, for the 2017 study, analyze Order of Merit as a measure of achievement across demographic sub-groups.

3. As discussed with the SLT and AEB, I view reference (a) as sensitive data; for SLT and AEB use only. Further distribution is not permitted without my consent.

4. Thank you for your ongoing and continued efforts in assessing the Naval Academy's effectiveness in meeting our mission.


W. E. CARTER, JR

USNA Proportional Outcomes Update



January 2017

Extracted from Nov 2015 Proportional Outcomes Study Deep Dive Brief

Proportional Outcomes Index (POI): An index of **1.0** means proportional representation (i.e., “equity”) for the educational outcome being analyzed (e.g., graduation completion) does exist for targeted group in comparison to the overall population.

Race/Ethnicity Graduation Rates

Classes 2009-2012				Classes 2013-2015			
Categories	%Enroll	%Grad Total	POI	Categories	%Enroll	%Grad Total	POI
Other Race/Ethnic Groups (OREG)	23.7%	22.4%	0.95	Other Race/Ethnic Groups (OREG)	35.0%	32.6%	0.93
White	74.4%	75.6%	1.02	White	65.0%	67.4%	1.04
OREG Composition	%Enroll	%Grad Total	POI	OREG Composition	%Enroll	%Grad Total	POI
African American	4.4%	3.7%	0.84	African American	7.9%	6.6%	0.84
Asian	2.9%	2.8%	0.98	Asian	4.7%	4.8%	1.02
Hispanic	10.5%	10.2%	0.97	Hispanic	13.6%	12.6%	0.93
Multi-Races	4.9%	4.7%	0.96	Multi-Races	8.1%	7.5%	0.93

The gap in the proportional outcomes index widened between Whites and OREG from 2013-15. The largest disparity noticed is for African Americans.

Superintendent to AEB

1. I do not direct changes to any policies/procedures/programs
[REDACTED]
2. *Request further disaggregated data analysis, with an effort on controlling key variables such as entering academic aptitude, to better understand attrition patterns and causal factors for a lower African American POI.*
[REDACTED]
3. Continue proportionality outcome studies biennially
[REDACTED]

African Americans

	% Enroll	% Graduate	AA Grad Rate	Overall Grad Rate	POI
2013-2015	7.9%	6.6%	72.1%	86.1%	0.84
2014-2016	7.6%	6.7%	78.3%	87.8%	0.89
2015-2017*		*projection			

5 U.S.C. §552(b)(1)

2013-2016 Grad Rates by Combined SAT

	<1000	1000-1040	1050-1090	1100-1140	1150-1190	1200-1240	1250-1290	1300-1390	1400-1600	Total
AA Midn	52.9%	59.4%	79.5%	82.3%	83.6%	74.4%	83.3%	87.5%	90.9%	76.3%
All Midn	66.0%	70.3%	78.3%	85.9%	82.6%	85.7%	88.1%	90.0%	90.1%	87.0%
POI	0.80	0.84	1.02	0.96	1.01	0.87	0.95	0.97	1.01	0.88
	<1050	1050-1600								Total
AA Midn	55.4%	82.3%								76.3%
All Midn	68.2%	87.9%								87.0%
POI	0.81	0.94								0.88

2013-2016 Grad Rates by Math SAT

	<550	550-590	600-640	650-690	700-740	750-800	Total
African American	69.5%	67.6%	89.5%	91.9%	73.7%	100%	76.3%
All Midshipmen	74.2%	79.6%	87.9%	90.1%	88.2%	91.0%	87.0%
POI	0.94	0.85	1.02	1.02	0.84	1.10	0.88

	<600	600-800	Total
African American	68.5%	88.4%	76.3%
All Midshipmen	77.5%	89.3%	87.0%
POI	0.88	0.99	0.88

2013-2016 Grad Rates by Verbal SAT

	<550	550-590	600-640	650-690	700-740	750-800	Total
African American	69.6%	80.4%	80.3%	80.5%	88.9%	83.3%	76.3%
All Midshipmen	79.4%	85.3%	86.9%	89.5%	88.3%	91.7%	87.0%
POI	0.88	0.94	0.92	0.90	1.01	0.91	0.88

2013-2016 Grad Rates by WPM

5 U.S.C. §552(b)(5)

Total

AA Midn	48.0%	72.7%	79.8%	78.9%	90.9%	95.5%	100%	-	76.3%
All Midn	57.6%	74.7%	83.2%	86.1%	87.7%	91.4%	93.3%	95.8%	87.0%
POI	0.83	0.97	0.96	0.92	1.04	1.05	1.07	-	0.88

5 U.S.C. §552(b)(5)

Total

AA Midn	48.0%	80.7%	76.3%
All Midn	57.6%	87.8%	87.0%
POI	0.83	0.92	0.88

	AA % Enroll	AA % Graduate	AA Grad Rate	Overall Grad Rate	AA POI
2013-2015	7.9%	6.6%	72.1%	86.1%	0.84
2014-2016	7.6%	6.7%	78.3%	87.8%	0.89
2015-2017*	*projection				5 U.S.C. §552(b)(5)

5 U.S.C. §552(b)(5)

Summary of Findings

Proportional Outcome equity was not being achieved for all AA

- AA with stronger entering aptitude had relative equity with peers
- AA with weakest entering aptitude did not succeed equitably w/peers

Inequity cause for weakest entering aptitude AA's unknown

Recent Classes are achieving much more equity in success

Recommendations

5 U.S.C. §552(b)(5)